

# Arm spasticity can be reversible even after decades: A case report treated with local vibration

A. Sancesario\*, L. Giordani, C. Scarpini, C. Foti  
*Physical and Rehabilitation Medicine Tor Vergata University, Rome, Italy*  
\*Corresponding author.



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**Background.**– To report the clinical effect of local vibration (LV) on spasticity of the right arm in a patient with long-term hemiplegia. Spasticity is one of the main secondary effects of stroke, and it can be modulated by peripheral and central inputs and physical therapy. However, it is not clear whether the effects of spasticity could be reversible even after more than two decades.

20 years after a juvenile hemorrhagic stroke in the left fronto-parietal cortex. The patient presented flexor hypertonia of the upper extremity with severe limitation in the range of motion (ROM). He was evaluated with Modified Ashworth Scale (MAS) for spasticity and with DrGoniometer® for ROM. Rehabilitation program focused on passive mobilization, muscle stretching and LV (30 Hz). The treatment lasted 10 sessions, 3 times a week.  
**Results.**– Clinically significant reduction of flexor hypertonia occurred, with increased range of motion of the upper extremity and improvements in daily living activity.  
**Conclusions.**– Flexor hypertonia of the upper extremity is a functional phenomenon involving neural and muscular plastic changes, which can be reversible, at least in part, even after decades if osteomuscular structural changes had not secondarily occurred.

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